

REMARKS

In an Office Action mailed February 4, 2003, the Examiner rejected Claims 1-3, 5, 7-8, 11-12 and 19-20 under 35 U.S.C. §102(e) or 102(b) as being anticipated by Pisani. Claims 1-4, 7-8 and 11-13 were rejected under 35 U.S.C. §103(a) as being unpatentable over Pal. Claims 1-25 stand rejected under §103(a) as being unpatentable over Pisani. Claims 1-25 also stand rejected under §103(a) as being unpatentable over Stanforth in view of Pisani and over Pisani in view of Stanforth, as well as over Forrester. Claims 1-4, 7-9, 11, 17 and 18 stand rejected under §103(a) as being unpatentable over Cody. Claims 1 and 4-18 stand rejected under §103(a) as being unpatentable over Ueshima in view of Uetake.

A request for an extension of time for three months accompanies this response so the response will be deemed to have been timely filed. No other fee is believed due, however, should any other fee be due, please consider this to be a request to charge the fee to Deposit Account No. 17-0055.

The claims are amended to recite that the incubating steps are carried out at an acidic pH ranging between 0.1 and 6.0. Support for this amendment is found in the specification in paragraph [00024]. The claims are also amended to recite that alkali is added after incubation under the claimed acidic conditions. Support for this amendment is found at the end of paragraph [00017] and again in paragraph [00030] which specifically describes adding alkali after incubation because the treatment method proceeds more efficiently at strongly acidic pH levels.

This recognition of the importance of pH is not mentioned in any art cited against the claims, nor has the Examiner argued that post-incubation treatment with alkali would be obvious in view of the cited art. Indeed, the applicants contend that the cited art fails to appreciate the importance and desirability of incubating the particulate matter under acidic conditions and that the art teaches a single treatment step. When that step includes an alkali, according to the cited art, it is provided to moderate the pH such that the advantageous outcome of the claimed method is not realized. Having appreciated that the reaction is more efficient under those conditions and also that these conditions substantially reduce lead bioaccessibility, applicants believe that the claims are novel and unobvious. A notice of allowance is respectfully requested.

Pisani et al. only disclose adding all of the treatment additives before curing. In particular, the Summary of the Invention and Detailed Description stress the importance of pH buffering during treatment.

Pal discloses two-step mixing, but discloses at column 5, lines 48-51 that the two steps can occur in any order. This is contrary to the claimed invention where incubation under acidic condition precedes treatment with alkali. Notably, in either case, Pal does not describe a desire to maintain an acidic condition during incubation. Moreover, the Examiner incorrectly states that Pal teaches the treatment materials are maintained above 30°C. The Examiner will note in column 6, lines 36-38 that the solution and treatment process of Pal are maintained above 30°F. Pal notes that this is intended only to prevent formation of ice that creates material handling problems. In contrast, the claimed invention is preferably practiced at temperatures above ambient temperature (defined in the specification at paragraph [00024] to be about 25-30°C), a temperature substantially higher than that of Pal.

Similarly, Stanforth discloses mixing together first and second additives, including an alkali pH controlling agent, before any incubation, in contrast to the claimed invention. The Examiner's attention is directed to columns 5 and 6 of Stanforth which describe the treatment conditions. Where first and second additives are used, the two are consistently described as "combinations of additives and pH control agents," there being no suggestion of a subsequent addition of alkali after treatment. Likewise, column 7, lines 20-27, a section highlighted by the Examiner, refers to the mixture of the first additive and the second additive, the pH controlling agent.

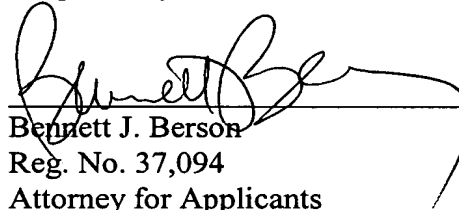
Also Forrester discloses mixing treatment materials with metal contaminants and spraying with water, as the Examiner notes. It is also notable that no distinction is made in Forrester for a two-step method in which an alkali is added after treatment with the treatment materials.

Cody also teaches use of a phosphate compound and may perhaps teach use of an alkali compound. However, column 5, lines 38-45, cited by the Examiner, simply discloses applying the selected treating agent(s) in combination, if more than one is used, to the soil to be treated and allowing sufficient reaction time to immobilize lead. Indeed, Cody discounts the value and importance of pH control in the disclosed treatment process (see column 6, line 47).

The Examiner acknowledges that the alkali of Ueshima, cement, is an essential constitutive component of the waste treating agent which, according to column 9, line 60, is added to the waste, optionally with water, kneaded, cured, and solidified. No second treatment step is disclosed. Uetake is not to the contrary, and is cited only for the unremarkable proposition of using heat to drive off water in the process of curing.

In summary, the two-step method claimed by the applicants differs substantially in process and in result from any method cited by the Examiner. Accordingly, applicants maintain that the methods of the pending claims are patentably distinct from those in the cited art and that the various rejections over Pisani, Pal, Stanforth and Pisani, Pisani and Stanforth, Forrester, Cody, and Ueshima with Uetake cannot stand and should be withdrawn. Reconsideration is respectfully requested.

Respectfully submitted,



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